

Amendments to the Claims:

Please amend claims 1, 8, 10, 13, 15, and 18 as presented below and cancel claim 7.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A battery pack for powering a communication probe used for optical communication between an external device and a diagnostic tool comprising:

a battery housing having at least one battery for powering [[a]] an optical communication probe;

a cable for coupling data signals between the battery housing and a diagnostic tool that is external to the battery housing; and

a switch within the housing for selectively coupling the battery to the optical communication probe a cable for delivering to deliver electrical power from the battery to the communication probe, the switch being coupled to [[the]] power leads of the battery and also being coupled to a power status signal provided to the switch through the cable coupling the battery pack and the external from a diagnostic tool, the power status signal indicating whether the diagnostic tool is in an active or sleep mode, so that the switch selectively couples the battery to the [[cable]] optical communication probe to deliver [[so]] electrical power from the battery may be delivered to the communication probe in response to the power status signal from the diagnostic tool indicating the diagnostic tool is in an active state mode.

Claim 2 (original): The battery pack of claim 1 further comprising:

a battery charger circuit coupled to the battery, the battery charger circuit being adapted to couple to an AC power source so the battery charger may be used to recharge the battery when the battery charger circuit is coupled to the AC power source.

Claim 3 (original): The battery pack of claim 1, wherein the power status signal is generated by a watchdog timer associated with the diagnostic tool in response to expiration of the watchdog timer.

Claim 4 (original): The battery pack of claim 1, wherein the battery is a lithium battery.

Claim 5 (original): The battery pack of claim 1, wherein the battery is a disposable battery.

Claim 6 (original): The battery pack of claim 5 further comprising:

a positive and negative interconnect for directly coupling the battery to the communication probe; and
the switch selectively couples the battery to the positive and negative interconnect in response to the power status signal being active.

Claim 7 (canceled).

Claim 8 (currently amended): A method for conserving power in a battery that powers a communication probe used for optical communication between an external device and a diagnostic tool comprising:

receiving a power status signal from a diagnostic tool, the power status signal indicating whether the diagnostic tool is in an active or a sleep mode; and
selectively coupling a battery to [[a]] an optical communication probe to power the communication probe for bi-directional optical communication with a device that is external of the communication probe in response to [[a]] the power status signal from [[a]] the diagnostic tool indicating the diagnostic tool is in an active state mode.

Claim 9 (original): The method of claim 8 further comprising:

re-charging the battery from an external AC power source.

Claim 10 (currently amended): The method of claim 8 further comprising:

generating [[a]] the power status signal that indicates the diagnostic tool is in an active mode in response to user activity at the diagnostic tool.

Claim 11 (original): The method of claim 8, wherein the battery is selectively coupled to the communication probe through a cable.

Claim 12 (original): The method of claim 8, wherein the battery is selectively coupled to the communication probe through a positive and negative interconnect.

Claim 13 (currently amended): A diagnostic system for an appliance comprising:

a diagnostic tool that generates a power status signal indicating whether the diagnostic tool is in an active mode or a sleep mode;

a low intensity optical communication probe for bi-directional optical communication with an external device;

a battery for powering the low intensity optical communication probe;

a switch for selectively coupling the battery to the low intensity optical communication probe to provide power from the battery to the communication probe, the switch selectively coupling the battery to the communication probe in response to [[a]] the power status signal generated from the diagnostic tool indicating the diagnostic tool is in the active mode.

Claim 14 (original): The system of claim 13 further comprising:

a watchdog timer associated with the diagnostic tool for generating the power status signal.

Claim 15 (currently amended): The system of claim 14 wherein the watchdog timer generates an active status mode signal for the power status signal in response to user activity at the diagnostic tool.

Claim 16 (original): The system of claim 13 further comprising:

a re-charging circuit for converting AC power to a form for re-charging the battery.

Claim 17 (original): The system of claim 13 further comprising:

a housing in which the battery and switch are mounted, the housing being directly coupled to the diagnostic tool.

Claim 18 (currently amended): A method for enabling optical communication between a diagnostic tool and a communication probe comprising:

powering a low intensity optical communication probe with a battery for bi-directional optical communication with a device that is external of the optical communication probe; and

selectively de-coupling the battery from the low intensity optical communication probe in response to a power status signal generated by a diagnostic tool indicating the diagnostic tool is in sleep mode.

Claim 19 (original): The method of claim 18 further comprising:

generating the power status signal in response to user activity at the diagnostic tool.

Claim 20 (original): The method of claim 18 further comprising:

converting AC power to a form for re-charging the battery; and applying the converted AC power to the battery to re-charge the battery.